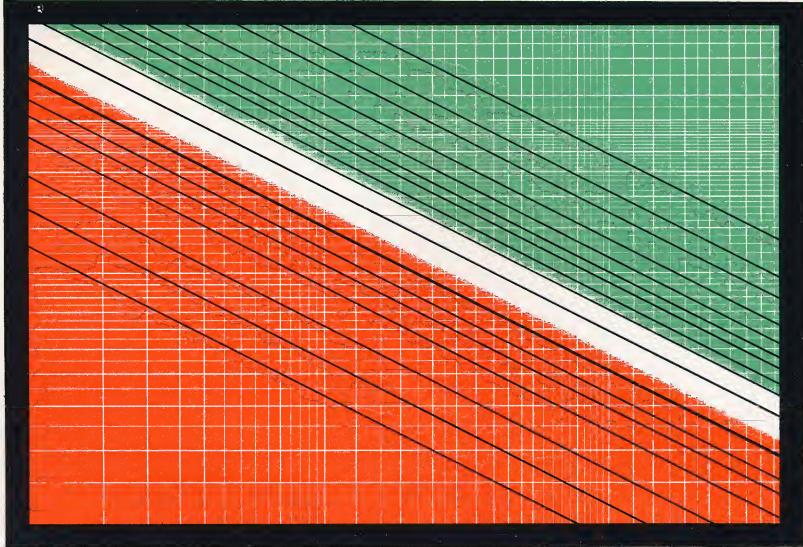


# LORD®



ENGINEERED VIBRATION AND SHOCK CONTROL

**ISOLATION**

**EFFICIENCY CURVE**

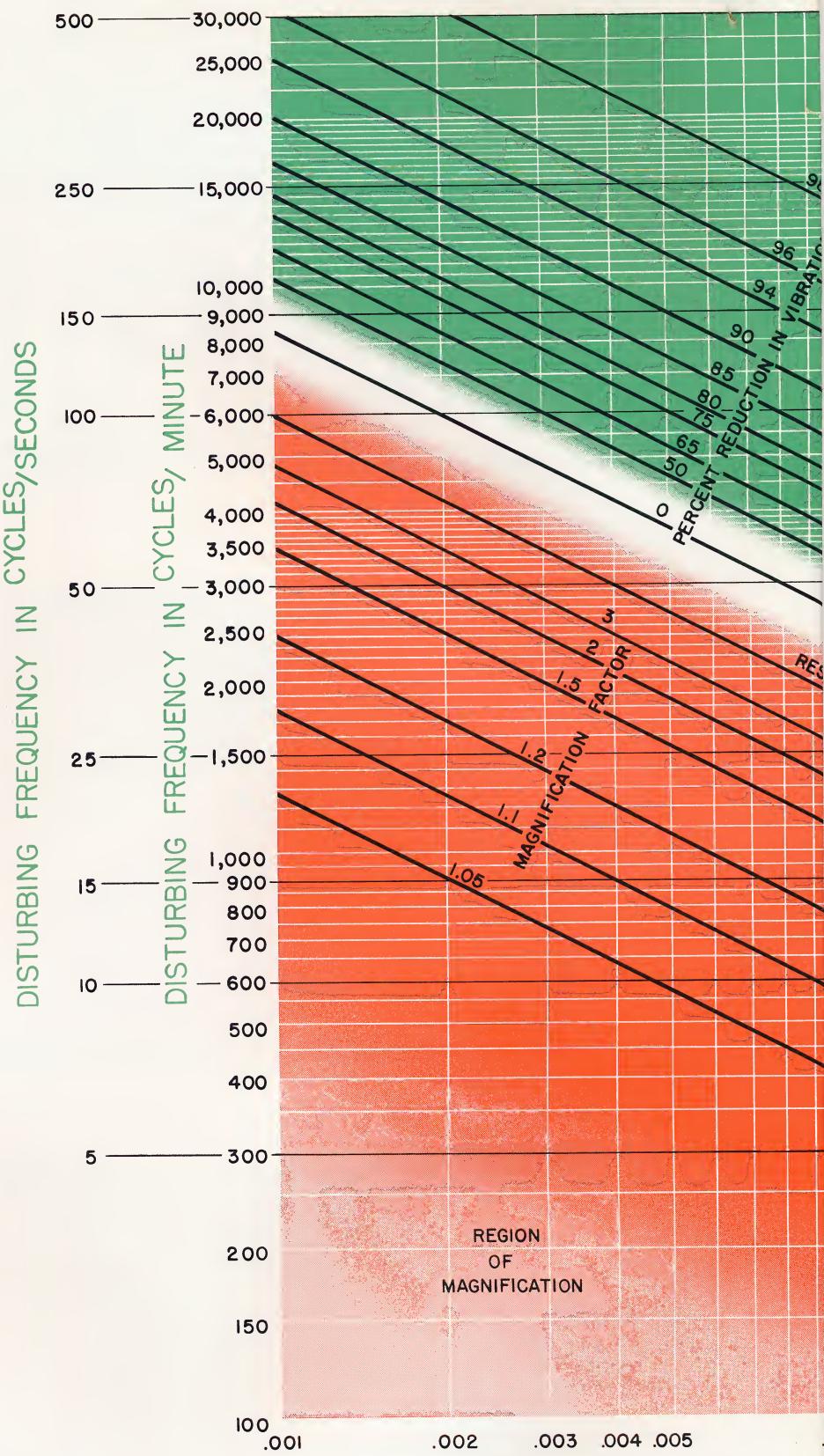
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# LORD

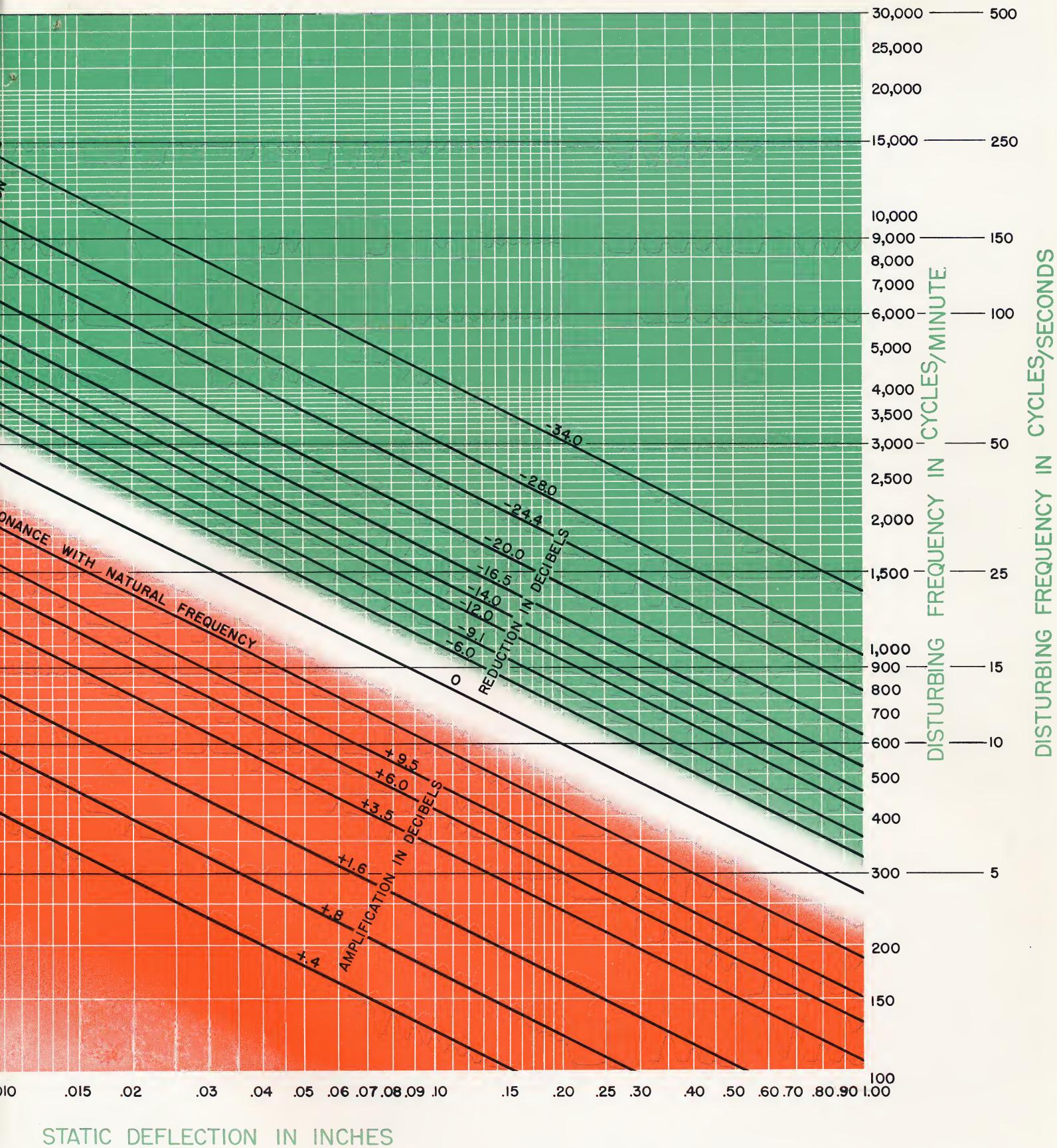
## engineered vibration and shock control systems

**ISOLATION  
EFFICIENCY  
CURVE FOR  
FLEXIBLE  
MOUNTING  
SYSTEMS**



For simple linear vibration, the above curves illustrate the percentage of vibration isolation it is possible to obtain in a flexibly mounted assembly with any combination of static deflection and disturbing frequencies. The area printed in red shows the region of magnification of vibration that occurs when the ratio of the disturbing frequency to the

natural frequency of the mounted assembly is less than  $\sqrt{2}$ . A condition of resonance exists when the natural frequency of the assembly and the disturbing frequency are equal. The green area illustrates the percentage of the vibratory forces prevented from reaching the supporting structure when proper flexible mountings are selected. Reduction in



## STATIC DEFLECTION IN INCHES

transfer of vibratory forces is obtained only when the ratio of the disturbing frequency to the natural frequency is greater than  $\sqrt{2}$ .

The term decibel as used on this curve is mathematically expressed by the equation: Decibels =  $20 \log_{10} \frac{A_0}{A_1}$

Where  $A_0$  is the amplitude of the mounted mass and  $A_1$  is the amplitude of the disturbing frequency.

Additional copies of this curve are available for distribution to other interested members of your organization or for your technical files. Write to LORD Manufacturing Co., Erie, Pa., or contact the nearest LORD Field Engineer.

*make Lord's technical team a part of your group . . .*

The very start of your product development project is the time to make use of Lord's modern technical facilities, expert engineering staff, and 40 years of vibration/shock/noise control experience.

Employing an integrated systems approach, Lord engineers work closely with your own technical group from initial design stages to finished product. Early association is an important factor and enables you to effectively utilize specialized knowledge and research methods. Ultimate result is a reliable and economical system for protecting critical components from disturbing or destructive environments.

Team up with Lord on all your vibration/shock/noise control problems. Contact your nearest Lord Field Engineering Office.

**LORD MANUFACTURING COMPANY**  
Division of Lord Corporation • Erie, Pennsylvania 16512

*Field Engineering Offices:* Atlanta: 237-9247 • Boston: 426-9135 • Chicago: 654-0850 • Dayton: 298-9911 • Detroit: 357-2150 • Erie: 453-6526 • Kansas City: 931-0138 • Los Angeles: 464-7593  
New York City: 279-8042 • Palo Alto: 327-4545 • Paramus, N.J.: 343-5333 • Philadelphia: 735-8852  
*Canada:* Railway & Power Engineering Corporation, Limited • *Overseas:* Aviquipo, Incorporated



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# LORD MANUFACTURING CO.

### *Division of Lord Corporation*

## **Erie, Pennsylvania 16512**

- Thank you for your inquiry.** Attached is the information you requested on Lord products or vibration/shock/noise control.

  - **For immediate service**, contact the Lord Field Engineering office at the address or phone listed on the reverse side of this card.
  - **For further information** that directly pertains to your application, please fill out and return the attached card.

LORD MANUFACTURING CO.  
Division of Lord Corporation  
Erie, Pennsylvania 16512



**LORD MANUFACTURING COMPANY • ERIE, PENNSYLVANIA 16512**

**1. My inquiry was for:**

- General reference only
- Specific application

**2. Type of application** \_\_\_\_\_

**3. Total estimated annual requirements**

\_\_\_\_\_ units.

Name \_\_\_\_\_ Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**4. We will specify in about:**

- 6 months or less       12 months
- 18 months       24 months or longer

**5.**  I would like a Lord Field Engineer  
to contact me.

**6. Comments:** \_\_\_\_\_

(Please detach before mailing)

**312 Forest Avenue  
Paramus, New Jersey 07652  
Phone: 261-0800  
Phone: N. Y.—279-8042**

You may obtain more information from  
your nearest Lord Field Engineering Office: